

REMARKS

Claims 1 – 17 are in this Application. No new matter has been added. In the Office Action mailed on May 18, 2001, the Examiner rejected claims 1-3, 6, 8, 9, and 11-13 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,878,036 (*Spartz et al.*) in view of U.S. Patent No. 5,822,420 (*Bolon et al.*). The Examiner rejected claims 4-5, 7, 10, and 14 under 35 U.S.C. §103(a) as being unpatentable over *Spartz* in view of *Bolon* as applied to claims 1, 6, and 11, and further in view of U.S. Patent No. 5,633,868 (*Baldwin et al.*). Applicants respectfully traverse the Examiner's rejections.

35 U.S.C. §103(a): *Spartz* and *Bolon*

Neither *Spartz* nor *Bolon* teach features of overcoming deficiencies present in the IS-634 Mobile Switching Center – Base Station Compatibility Standard for Dual Mode Wideband Spread Spectrum Cellular Systems - as is found in independent claims 1, 6, and 11.

Applicants' independent claims 1, 6, and 11 overcome conditions in cellular communications whereby a mobile subscriber attempts to originate a call while another party is attempting to call the same mobile subscriber. *Spartz* teaches a method and apparatus for combining a CDMA system with a GSM system to reduce the cost of providing superior CDMA service in a region already unwisely invested in GSM infrastructure. *Bolon* teaches a protocol for Digital Loop Carriers unrelated to IS-634, and in fact, teaches away from the Applicants' claimed features by describing protocols relating to North American standard 1.544 Mbps T1 communications and CCITT standard 2.048 Mbps E1 communications, as well as TR-303 and the European Telecommunications Standard Institute V5 standards describing interfaces for remote digital terminals and local digital switches.

The Examiner concedes that "*Spartz* fails to disclose a step of detecting the occurrence of a condition whereby a mobile subscriber attempts to make a call while another party is attempting to call the same mobile subscriber and generating a message signal at a mobile switching center for transmitting to the mobile subscriber

via base station.” (Detailed Action, Item 3). Further, it is stated that the combinable element found in Spartz is “a mobile switching center (MSC) connected to a base station sub-system (BSS) via an A-Interface.” (Detailed Action, Item 3). Applicants respectfully submit that most known wireless telephone communication systems support a mobile switching center connected to a base station, and that this portion of any prior art related to a wireless communication system could be used to piece together an improper argument for invalidating a new combination of old elements.

The Examiner states that “in the same field of endeavor, *Bolon* discloses a method of detecting the occurrence of a condition whereby a mobile subscriber attempts to make a call while another party is attempting to call the same mobile subscriber and generating a message signal at a switching center for transmitting to the mobile subscriber via base station. (See Fig. 3, col 3, lines 3-15) Applicants respectfully submit that *Bolon* is not “in the same field of endeavor,” and that the method described in *Bolon* for handling the condition is unrelated to Applicants’ claimed method.

Moreover, the Customer Provided Equipment (CPE) and the Network Interface Unit (NIU) components of the cited reference are not related to the BSS and MSC endpoints of the Applicant’s claimed invention. Further, neither the Access Network (AN) and Local Exchange (LE) endpoints of *Bolon* are related to the mobile subscriber station endpoints of the Applicants’ invention, nor is the protocol of *Bolon* for multilink AN-LE interfaces that provides for common channeling signaling on all AE-LN links and the transfer of calls and control to operational Digital Loop Carrier (DLC) links upon detection of a link failure related to the normal concurring call condition of Applicants’ invention. The DLC protocol of *Bolon* permits the AN to assign channels on an AN-LE link, although error-tolerance and self-aligning is not related to the IS-634 Mobile Switching Center – Base Station Compatibility Standard for Dual Mode Wideband Spread Spectrum Cellular Systems. DLC networks are not the same field of endeavor as mobile telephone communications systems.

Clearly, the methods of *Bolon* for handling the above-described condition is unrelated to Applicants’ claimed methods. Rather than using an IS-634 Alert with Information signal on a BSS to MSC interface, *Bolon* teaches away from Applicant’s

claimed invention by disclosing a method whereby a radio base unit (RBU) sends a ring-trip signal to the NIU upon reception of an off hook signal from the CPE to resolve a glare condition between a CPE and an RBU. (Col. 10, lines 29-34). Likewise, a glare condition between an RBU and an NIU is not resolved with IS-634 messages sent over an Air-Interface. Rather, it is resolved by the RBU rejecting the incoming signal and proceeding to process the outgoing call. (Col. 10, lines 41-63.) Further, glare conditions disclosed in *Bolon* between other unrelated endpoints (such as a PSTN and an NUI) are all handled differently using unrelated methods depending on whether an analog or digital system is in use. (Col. 10, line 63 – col. 11, line 26).

Improper Combination

The proposed combination of *Spartz* with *Bolon* is also improper. As set forth by the United States District Court, District of Columbia in Colt Industries Operation Corp. v. Index Werke KG, 205 USPQ 990 (1979):

In deciding on the question of obviousness under 35 U.S.C 103, it is not realistic to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of the other parts necessary to the full appreciation of what such references fairly suggest to one of ordinary skill in the art... . The mere existence in the prior art of the individual elements of a patented invention does not, without more, invalidate the patent under 35 U.S.C. 103. There must be positive evidence that the bringing together of such elements would have been obvious to a person of ordinary skill in the art. As the Second Circuit has observed: It would reduce patent protection almost to a nullity if an infringer could, in light of a subsequent disclosure, comb the prior art and piece together portions of earlier patents, while dropping other parts and thereby invalidating a new combination of old elements.

Applicants submit that there is no such “positive evidence that the bringing together of such unrelated elements would have been obvious to a person of ordinary

skill in the art.” The references do not have common ground - other than being the portions of various communications systems - by which *Spartz* could be combined with *Bolon* in a workable combination. With the lack of a teaching step for detecting the occurrence of a condition whereby a mobile subscriber attempts to make a call while another party is attempting to call the same mobile subscriber, and generating an IS-634 message signal at a mobile switching center for transmitting to the mobile subscriber via a base station, the cited references do not provide “positive evidence” that a protocol for common channeling signaling and link failure detection on AN-LE links of a DCL network in combination with Applicants’ other claimed elements are possible. Consequently, the combination of *Spartz* and *Bolon* fails to render Applicants’ claimed invention obvious.

The References Could Not Be Suggested to One Skilled in the Art

Applicants further submit that such references do not fairly suggest to one skilled in the art, at the time that Applicants’ invention was made, that *Spartz* and *Bolon* might be combined to produce Applicants’ claimed invention. Rather, it is only after one of ordinary skill in the art has read Applicants’ disclosure and used impermissible hindsight reasoning that it might occur to the artisan, for example, to generate a IS-634 message signal at a mobile switching center for transmitting to the mobile subscriber via a base station when a mobile subscriber attempts to make a call while another party is attempting to call the same mobile subscriber. As stated by the United States District Court, Northern District of Illinois Novo Industri A/S v. Travenol Laboratories, Inc., 211 USPQ 379 (1981):

Obviousness is not determined by the application of hindsight, or retrospect, with the knowledge of patentee’s discovery. Rather, it is determined as of the time of invention, based solely on the knowledge disclosed by the prior art as a whole.

Applicants respectfully submit that there is no suggestion to combine the references as cited by the Examiner to arrive at the IS-634 messaging between an MSC and a BSS of Applicants’ invention. As the court of Appeals for the Federal

Circuit stated in ACS Hospital Systems, Inc. v. Montifore Hospital et al., 221 USPQ 929 (1984):

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teaching of references only if there is some suggestion or incentive to do so.

Applicant asserts that the art cited by the Examiner fails to provide any teaching or suggestion of Applicants' combination as now claimed in independent claims 1, 6, and 11, and its following dependent claims. Neither of the references expressly or implicitly teach Applicants' claimed combination or suggest, without hindsight, the application of IS-634 messaging to resolve conditions involving competing access to a mobile subscriber station. In addition, as the Court of Appeals for the Federal Circuit stated in Litton Industrial Products, Inc. v. Solid State Systems Corp., 225 USPQ 34 (1985):

It is elementary that the claimed invention must be considered as a whole in deciding the question of obviousness... The references fail not only to expressly disclose the claimed invention as a whole, but also fail to suggest to one of ordinary skill in the art modifications needed to meet all the claim limitations.

Applicants assert that when Applicants' invention is taken as a whole, it would not be obvious based on the references cited by the Examiner to construct Applicants' invention using IS-634 message signals. The references cited by the Examiner fail to teach or suggest Applicants' claimed invention as a whole, and furthermore fail to suggest the modifications needed to meet all the claim limitations.

In view of the above-discussed insufficiencies of *Bolon* and *Spartz* to render Applicants' invention obvious, it is respectfully requested that the section 103 rejections of claims 1-3, 6, 8, 9, and 11-13 be withdrawn.

35 U.S.C. §103(a): *Spartz and Bolon* in view of *Baldwin*

The Examiner states that *Baldwin* discloses transmitting Alert With Information Message Signals between a wireless gateway and a subsystem of a CDMA wireless network. Hence, the Examiner concludes that *Spartz and Bolon* in view of *Baldwin* render claims 4 – 5, 7, 10, and 14 unpatentable. Applicants respectfully disagree.

The Alert with Information messages used in unrelated virtual circuit management do not properly render the combination of references of *Spartz and Bolon* in view of *Baldwin* improper. As previously discussed with respect to *Spartz and Bolon*, Applicants assert that the addition of the *Baldwin* reference fails to teach or suggest Applicants' claimed invention utilizing IS-634 messaging signals.

In view of the further described insufficiencies of the *Spartz and Bolon* references in combination with the *Baldwin* reference to render Applicants' invention obvious, it is respectfully requested that the section 103 rejection of claims 4-5, 7, 20, and 14, be withdrawn.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicants submit that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application is earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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